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NOTICE OF ALLOWANCE AND FEE(S) DUE

51921 7590 08/06/2010 MARK D. SARALINO (PAN) RENNER, OTTO, BOISSELLE & SKLAR, LLP 1621 ETICLID AVENUE EXAMINER
CHUNG, PHUNG M

ART UNIT PAPER NUMBER

2117 DATE MAILED: 08/06/2010

19TH FLOOR CLEVELAND, OH 44115

 APPELICATION NO.
 FILING DATE
 FIRST NAMED INVENTOR
 ATTORNEY DOCKET NO.
 CONFERMATION NO.

 10/597.859
 04/23/2007
 Vishal V. Ghotge
 YAMAP1013US
 3821

TITLE OF INVENTION: DATA RECORDING/REPRODUCTION FOR WRITE-ONCE DISCS

 APPLN, TYPE
 SMALL ENTITY
 ISSUE FEE DUE
 PUBLICATION FEE DUE
 PREV. PAID ISSUE FEE
 TOTAL FEE(S) DUE
 DATE DUE

 nonprovisional
 NO
 \$1510
 \$300
 \$0
 \$1810
 11/08/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THE APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

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If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

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B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

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II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

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appropriate. All further indicated unless correcte maintenance fee notifical	correspondence includir ed below or directed oth	or transmitti g the Patent erwise in Bl	ng the ISSI , advance o ock 1, by (THE FEE and PUBLICATI rders and notification of r a) specifying a new corres	ON PEE (il requi naintenance fees w pondence address;	ill be and/or	mailed to the current (b) indicating a sepa	nould be completed where correspondence address as trate "FEE ADDRESS" for
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RENNER, OTTO 1621 EUCLID A	7590 08/06 RALINO (PAN) O, BOISSELLE & S AVENUE		LP		Cert	ificate	of Mailing or Trans	
19TH FLOOR CLEVELAND,	OH 44115							(Depositor's name)
								(Signature)
								(Date)
APPLICATION NO.	PPLICATION NO. FILING DATE		FIRST NAMED INVENTOR		ATTORNEY DOCKET NO.		CONFIRMATION NO.	
10/597,859	04/23/2007			Vishal V. Ghotge	YAMAP1013US		3821	
TITLE OF INVENTION	: DATA RECORDING/	REPRODUC	TION FOR					
APPLN. TYPE	SMALL ENTITY	ISSUE FI	EE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE	FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO		\$1510 \$300		\$0		\$1810	11/08/2010
EXAM	EXAMINER		JNIT	CLASS-SUBCLASS				
	CHUNG, PHUNG M		17	714-723000	•			
I. Change of correspondence address or indication of "Fee Address" (2 CFR 1.53). Change of correspondence address (or Change of Correspondence Address from PTOS/B1/22) anatomical Correspondence Address from PTOS/B1/27, including from PTOS/B1/27, including from PTOS/B1/27, from				2. For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agent. If no name is Compared to the printing of the patent of the p				
(A) NAME OF ASSIG	SNEE			data will appear on the p T a substitute for filing an (B) RESIDENCE: (CITY crinted on the patent):	and STATE OR C	OUNT	RY)	ocument has been filed for
4a. The following fee(s): Issue Fee Publication Fee (N	o small entity discount p	ermitted)	4	b. Payment of Fee(s): (Plea A check is enclosed. Payment by credit car The Director is hereby overpayment, to Depo	d. Form PTO-2038	is atta	ched.	shown above) ficiency, or credit any n extra copy of this form).
	s SMALL ENTITY state	s. See 37 CF		☐ b. Applicant is no lon				
NOTE: The Issue Fee an interest as shown by the	d Publication Fee (if req records of the United Sta	aired) will no tes Patent and	t be accepte I Trademark	d from anyone other than t Office.	he applicant; a regi	stered a	uttorney or agent; or th	e assignee or other party in
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PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.



CLEVELAND, OH 44115

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10/597,859	04/23/2007	Vishal V. Ghotge	YAMAP1013US	3821				
51921 7	590 08/06/2010		EXAMINER					
MARK D. SAR.	ALINO (PAN)	CHUNG, PHUNG M						
	, BOISSELLE & SKLA	ART UNIT	PAPER NUMBER					
1621 EUCLID AV	2117							
19TH FLOOR		DATE MAILED: 08/06/2010						

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 604 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 604 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Application No. Applicant(s) 10/597 859 GHOTGE ET AL. Notice of Allowability Examiner Art Unit Phuna M. Chuna -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. This communication is responsive to amendment dated on 5/14/10. 2. The allowed claim(s) is/are 1-11. 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). b) \(\subseteq \text{Some* c) \subseteq \text{None of the:} a) \square All 1. T Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). * Certified copies not received: _____. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. Notice of References Cited (PTO-892) 5. Notice of Informal Patent Application 2. Notice of Draftperson's Patent Drawing Review (PTO-948) Interview Summary (PTO-413), Paper No./Mail Date Information Disclosure Statements (PTO/SB/08). 7. T Examiner's Amendment/Comment Paper No./Mail Date 3/26/10 4. T Examiner's Comment Regarding Requirement for Deposit 8. X Examiner's Statement of Reasons for Allowance of Biological Material Other .

/Phung M. Chung/ Primary Examiner Art Unit: 2117 Application/Control Number: 10/597,859

Art Unit: 2117

Allowable Subject Matter

The following is a statement of reasons for the indication of allowable subject matter: Claims 1-11 are allowable over the art of record. This is because the art of record does not teach or disclose a recording method, a recording apparatus and a system controller for writing data on a write-once disc as recited in claims 1, 7, 8, 9 and 10, and including, for example.

Claim 1: A recording method for writing data on a write-once disc, the write-once disc having a plurality of physical sectors, the write-once disc including a volume space having a plurality of logical sectors, each of the plurality of logical sectors corresponding to one of the plurality of physical sectors, the recording method comprising the steps of:

- (a) receiving a write instruction which specifies at least a logical sector in which data is to be written;
- (b) determining whether the logical sector specified by the write instruction corresponds to a recorded physical sector or an unrecorded physical sector;
- (c) when it is determined that the logical sector specified by the write instruction corresponds to an unrecorded physical sector,
 - (c1) writing the data into the unrecorded physical sector,
 - (c2) determining whether a verification of the data which has been written into a-the <u>previously unrecorded</u> physical sector <u>of (c1)</u> is successful,
- (c3) when it is determined that the verification of the data that has been written in (c1) is not successful,

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Art Unit: 2117

(c31) writing the data into an unrecorded physical sector other than the <u>previously unrecorded</u> physical sector <u>of (cl)</u> in which the verification of the written data is not successful, the unrecorded physical sector being selected from the plurality of physical sectors corresponding to the plurality of logical sectors in the volume space,

(c32) generating a remapping table including remapping information which remaps an original address of the physical sector corresponding to the logical sector specified by the write instruction to a remapping address of the selected previously unrecorded physical sector of (c31), and

(c33) writing the remapping table on the write-once disc; and

- (d) when it is determined that the logical sector specified by the write instruction corresponds to a recorded physical sector,
 - (d1) writing the data into an unrecorded physical sector other than the recorded physical sector corresponding to the logical sector specified by the write instruction, the unrecorded physical sector being selected from the plurality of physical sectors corresponding to the plurality of logical sectors in the volume space,
 - (d2) determining whether a verification of the data which has been written into the selected previously unrecorded physical sector of (d1) is successful,
 - (d3) when it is determined that the verification of the data that has been written in (d1) is not successful,
 - (d31) writing the data into an-another unrecorded physical sector other than the selected previously unrecorded physical sector of (d1) in

which the verification of the written data is not successful, the another unrecorded physical sector being selected from the plurality of physical sectors corresponding to the plurality of logical sectors in the volume space,

(d32) generating a remapping table including remapping information which remaps an original address of the physical sector corresponding to the logical sector specified by the write instruction to a remapping address of the another selected previously unrecorded physical sector of (d31), and

(d33) writing the remapping table on the write-once disc.

/Phung M. Chung/ Primary Patent Examiner